



(Courtesy of J. O. Cunningham.)

German Farm Women Returning From Market.

Co-Operative Farm Products Marketing

How It Is Done in Europe and May Be Done in America to the Profit of Both Farmer and Consumer

By MATTHEW S. DUDGEON.

CO-OPERATIVE GERMANY.

Berlin, Germany.—The German farmer calls upon co-operation to sell him his supplies. He asks it to market his eggs and his butter. It distills alcohol out of his potatoes and makes wine for him out of his fruit. Everywhere in Germany you will find co-operative elevators and warehouses for storing grain, co-operative societies for improving the breed of live stock, co-operative banks for furnishing loans to members, co-operative insurance companies for insuring against every imaginable damage. Co-operative societies are formed to meet the needs of agriculture at every turn—producing the raw material, converting the raw material into salable form, and placing the finished product upon the market.

"Agricultural co-operative societies have become so numerous in Germany as almost to jostle one another. There are at the present time more than 26,000 of them." These are the words of Henry Wolff, the great authority upon agricultural co-operation, and we have found his statement true. These 26,000 societies have nearly two and a half million members. Over half of these societies are credit associations, which have a working capital of over \$400,000,000. Moreover, the number of societies and the number of members are constantly increasing. The German farmer who in his way is an individualist and as independent as is the American farmer, has learned that co-operation is his salvation and believes in allying himself with his neighbors for the common economic defense.

How German Farmer Co-operates.

Everything the German farmer does he does co-operatively. If he wishes to purchase a farm he gets a 50 or 60 year loan from a Landschaften bank. When he finds it necessary to buy implements or live stock, or seeds, he uses money borrowed from a co-operative credit society, making short time loans. He gets his equipment of a co-operative store which furnishes him a guaranteed article at the lowest possible price. For when co-operation sells to the farmer, everything from garden seeds to threshing machines is guaranteed. If he wishes to insure his property he goes to a co-operative insurance company, which will insure his crops against loss by hail or wind; another co-operative insurance agency insures his house against fire, while another insures his live stock against sickness, accident, or legal destruction, following the discovery of tuberculosis or other contagious disease. His stock cattle come to him from a co-operative breeding farm. From co-operative associations he gets his scientific instructions as to the care of his cattle, as to the best feeds, as to the cure of animal diseases, as to the valuation of crops, as to fertilizers. His milk and cream he takes to a co-operative creamery, from which it is sold co-operatively. His very hens lay co-operative eggs which within an hour after they are laid may bear the stamp of a co-operative organization.

Even the farmer's wife has a tendency toward co-operation and is as alive to its advantages as is the farmer himself. Everywhere we find the women intelligent and conducting their domestic affairs as scientifically as do the men their farms.

Water Supply Companies.

One form in which co-operation has evinced its efficiency in Germany is a rather unique one, and is one which at least in some parts of the United States is worthy of careful study by American farmers. Scattered throughout Germany there are many co-operative societies for supplying water to its members. There are in the province of Hanover alone, for example, 35 such companies. Whether the community has been large or small, these supply companies have generally succeeded.

The advantages of co-operation in attacking the problem of water supply have been thus summarized: "By co-operation a sufficient sum of money can be raised to enable a source of water to be tapped, unquestionable as to purity, softness and quality; 2. Co-

operation ensures extreme economy in maintenance and management; 3. Co-operation enables the smallest community to provide itself with a really good water supply."

It is not impossible that there is in this German experience a suggestion for the irrigation companies in western America, where mismanagement and graft seem to have prevailed. Certainly a truly co-operative association organized upon the one man one vote plan, freed from all motives of excessive or speculative profits, and managed with the efficiency that is traditional in co-operative concerns could never have made shipwreck of so many fair prospects as have some of the irrigation companies in the western states.

Plowing by Steam.

The owners of the big wheat farms in the northwestern parts of the United States might sit up and take notice of some of the co-operative power plow companies which are operating in Germany. At present there are 46 such societies. The entire power equipment is owned by the society, and its members, even though they occupy comparatively small farms, are by this means enabled to have the benefit of the improved and cheaper work of the power plow. Experience here shows that the power plowing plant, consisting of a set of plows, tackle and steam or electric power, cannot be maintained economically unless it has something like 2,000 acres upon which to operate. The concerns are most carefully managed. A good machinist is always in charge of the outfit. In addition to his salary he is allowed a commission upon every acre plowed. He has entire charge of the operations and requires all members to remove all obstructions before work is undertaken. The rates are carefully graded according to the soil, the depth and the accessibility. In some cases, also, a less charge is made for plowing during the slack periods, the price being raised as the demand for services of the equipment increases.

Co-operative Automobiles.

It is said that every well-to-do American farmer has an automobile. In Germany, where the acreage is small and the farmer has less capital to invest in his equipment the farmer joins with his neighbor to purchase an automobile and a large number of co-operative motor societies have been formed. These machines, however, are not the touring cars and runabouts that are ordinarily used by the American farmer, but are the most prosaic utilitarian motor trucks which can move immense quantities of produce over the hard level roads of the German provinces.

German scientists and inventors have with great ingenuity produced machinery that accomplishes with little effort almost everything which in years past called for hard labor. The demand for power is consequently great and growing constantly. This has led to the organization of electrical supply works in connection with other agricultural co-operative organizations. Of these there are 510, which are purely co-operative, although there are in Germany over 2,000 companies which furnish more or less electrical power to those interested in agricultural pursuits.

Co-operative Societies Federated.

The co-operative spirit has not ceased when it has led the farmer to co-operate with his neighbors to form a local co-operative concern. The German genius for organization has led to a most elaborate system of co-ordination between the various local co-operative associations. For example, all co-operative dairies within a province will be united together in a central association which unifies and harmonizes the work of all the local organizations. These central provincial societies are in turn in an empire-wide federation with headquarters at Berlin. You will therefore find in that city find several central concerns, each of which is allied with hundreds of local societies. This centralization scheme has many advantages. It provides for supervision, inspection, and

audit which leads to good accounting systems and good business methods. The central office serves as a bureau of information and advice. In case of marketing the central society, by reason of its size and financial resources, gets into markets which would be altogether inaccessible to the little local concern. Without centralization German co-operation would be much less effective than it is.

Increased Quantity.

Here in Germany, as elsewhere, co-operation has not only enabled the farmer to make the most out of what he produces, but has increased the quantity and improved the quality of the product itself. This has been true in every line where co-operative organizations have become active. The results in dairying are fairly representative. In Brandenburg tests were made in 1908 which covered the production of over 1,000 cows. The average yield of milk per cow was found to be 2,661 kilograms, producing 95 kilograms of butter, and netting a profit of 108.06 marks per cow. In 1910 the average yield had increased to 2,885 kilograms of milk, producing 101 kilograms of butter, and netting 132.65 marks profit for each cow, an increase of 24.59 marks per cow, a matter of \$5,000 on the 1,000 cows.

German Co-operation Democratic.

German co-operation is, to paraphrase the recognized formula for democracy "of the members, by the members, and for the members." Nobody thinks of a German co-operative society as organized for the purpose of declaring dividends. The utmost returns that those who hold shares receive is a five or six per cent. profit. If a creamery, for example, finds itself with undivided profits it does not distribute them to the members in proportion to the shares they hold, but to the members who as patrons bring in the milk and cream, and they go to them in proportion to the quantity and quality furnished by each. These profits constitute as it were an additional price, which the patrons receive for their product. All, too, are managed upon the "one man one vote" plan. The member who holds only one share and brings in the milk of only one cow has the same voting power as the farmer with a thousand shares and a thousand cows. Co-operation is most emphatically democratic.

Good Quality and Good Business.

German co-operators themselves ascribe the success of their societies largely to good quality and good business methods. The societies pride themselves upon the fact that their output is better than that of privately owned plants. Their goods are in demand, they say, not because they are co-operative goods, but because they are good goods. The societies almost without exception have required that managers shall be skilled men with both experience and training. These positions pay good salaries, and candidates spend time and money qualifying themselves to hold them. As a result these concerns are most businesslike in every particular. The plants are efficient, the employers competent, and most excellent accounting systems are in vogue.

Co-operative Credit.

It is noticeable that in Germany there are more co-operative credit societies than marketing societies. Moreover, the average German enthusiast



German Co-operative Elevator.

will tell you that co-operation naturally begins with co-operative credit, rather than with co-operative marketing. It does not necessarily follow, however, that in America co-operative credit associations should precede co-operative marketing. Conditions in Germany differ greatly from those in the United States.

In the first place, the privately owned banking houses of Germany did not serve the German farmer even as adequately as the American banker is now serving the American farmer.

In the second place, marketing in Germany presents practically none of the difficulties encountered in America. Germany has by high tariffs forced the consumer to depend upon domestic production. The local demand for almost every farm product exceeds the supply. As a result there are two buyers demanding butter, for example, when only enough butter for one is available.

There are no long hauls, as in America, no long distance commission business. The producer more nearly meets the consumer face to face and gets his price. German marketing as compared to American is direct, simple, and free from complexities.

We must take the counsel of the German who ranks co-operative credit as more important than co-operative marketing with caution, since he has dealt with reversed conditions. We are firmly convinced, after a careful survey, that at least in America, the more prosperous scheme of co-operative marketing is more important than co-operative credit.

IMPORTANCE OF SEED

POTATO GROWER PAYS LITTLE ATTENTION TO QUALITY.

Comparatively Few Growers Give Sufficient Thought to Elimination of Diseased and Unproductive Strains of Tubers.

(By WILLIAM STUART.)

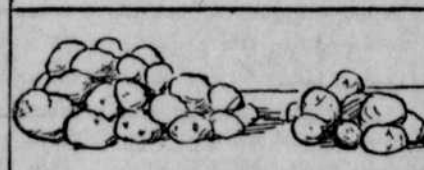
Of the many causes which operate to produce a low average potato yield in this country, poor seed is thought to be a very important one. The American potato grower pays too little attention to his seed potatoes. The European growers, especially those of Great Britain and Germany, pay very strict attention to the quality and quantity of the seed they use. This has led to a differentiation of the potato industry into seed and crop specialists. The seed specialist makes a business of producing high-quality seed, while the crop specialist pro-



Stem Rot Fungus.

duces a high-grade table potato. No such differentiation at least to the same extent, occurs in this country. It is true that in certain sections we now have a well-developed seed-potato-growing industry, but comparatively few growers in these sections are paying sufficient attention to the elimination of diseased and unproductive strains or to keeping the variety grown free from mixture with other varieties. It is believed, however, that the time is ripe for demanding a better grade of seed potatoes than is now generally obtained from either seedmen or growers.

The question of what constitutes good seed is a vital one, and possibly no two persons would fully agree in every particular upon this point. It would seem, however, that the following factors play an important role: Pure seed from productive plants, not over ripe, uniform in size and shape, firm and sound, with first sprouts just showing at planting time. Seed of such quality, if furnished suitable cultural conditions, will seldom fail to produce a remunerative crop. A conservative estimate of the increase that



No. 1—Strong Units.
No. 2—Yield From Tuber-Units Shown in No. 1.
No. 3—Yield From Tuber-Units Shown in No. 2.

might be expected from the use of high-grade seeds is certainly not less than ten per cent. Such an increase, based on the average of the past five years, would amount to over thirty-four and one-fourth million bushels, having an approximate valuation of \$21,000,000.

MACHINE FOR TESTING SEED

Incubator May Be Put to Good Use When Not Wanted for Hatching Eggs—Use False Tray.

While not in use for hatching, the machine may be used for testing seed by making a false tray of light wood which is filled with sand. The seed should be placed in the sand, covered and kept moist. Keep the temperature up to about 85 degrees, and the seed will germinate in a short time.

Even when it is in use for hatching, seeds may be tested by placing them between damp cloths in a plate, setting the plate under the egg tray in what is known as the chicken nursery.

Plants thus germinated in sand may be transplanted to the hotbed, not only testing the seed for vitality, but utilizing those so tested.

Don't Destroy Roots.

The roots of a plant spread out farther than its leaves or blades do. In the corn and cotton field they meet and interlap. These roots are essential to plant growth, and should not be cut off or injured. This is the reason for shallow cultivation. This makes a mulch and holds moisture but does not injure the roots.

RENEWING THE FARM FLOCKS

Best to Keep Over Both Yearling Hens and Pullets in Proportion of About Half and Half.

Under the ordinary farm conditions I believe that it is best to keep over both yearling hens and pullets, in proportion of about half and half.

As a breeder I consider the yearling hen superior to the pullet, as the eggs are usually larger and will produce better developed chicks. In fact, the vigor of the offspring is not decreased if the hen is kept three or four years.

Considered as a breeder alone, her value does not depreciate as long as she produces good chicks. But we must judge her value also by the total amount of her egg-yield, and we know that the older she grows the fewer eggs she will produce.

Experiment station results and practical experience go to show that it seldom pays to keep hens after they are two years old, except for breeding uses.

Notwithstanding the fact that pullets will lay more eggs than yearling hens, I believe it pays to keep as many yearling hens in the flock as pullets.

Many who keep a farm flock do not consider the cost of raising the pullets to an egg-producing age, while the year-old hens are making a profit for them.

Keeping about the same number of yearlings as pullets enables me to market about one-half of the older birds during the summer when they are in good condition, and will bring the highest price.

In this way I have plenty of room for the young pullets early in the fall, and get them into their houses and



A Prize Winner.

ready to begin laying before the cold weather comes on.

By planning my egg-producing flock in this way, I am able to supply regular customers, and maintain a fairly uniform egg-production during the entire year.

After the older birds are marketed, the yearlings alone must be depended upon to supply egg customers until the pullets begin to lay in the fall.

I have found it unsatisfactory to depend upon pullets alone to maintain a uniform production during the whole year.

Then again, if an incubator is not used for hatching it is imperative that we keep over a few yearling hens, if we are to secure early hatches to supply the increase to the flock.

SUCCULENT FEED FOR SHEEP

Most Flockmasters Have Been Slow in Experimenting With Silage—Must Be Fed Properly.

(By E. L. SHAW.)

The use of this succulent feed for sheep has attracted the attention of most farmers only during the past few years. Although a few sheepmen fed silage many years ago with good result, most flockmasters have been slow in giving it a trial. Owing to the wonderful increase in the use of silos on farms, and owing to the cheapness of silage as compared with other succulent feeds, such as roots, farmers are constantly raising the question regarding the feeding of silage to sheep. A great deal has been said of its bad effects upon sheep, but these have arisen either because an inferior quality of silage was fed or on account of carelessness on the part of the feeder in not feeding it properly.

A good quality of silage is extremely palatable and can be fed to all classes of sheep with good results. It must be borne in mind, however, that silage which is either very sour, moldy or frozen should not be fed. The amount of silage reported in feeding trials varies from one to five pounds per head per day. The amount to feed depends upon the class of sheep and the character of the other feeds comprising the ration. As a general rule from two to four pounds per head per day is considered as much as should be fed.

Success With Ducks.

Ducks have fewer insect enemies than chickens, but the rodents seem instinctively to recognize in them a savory feast, and they must be carefully housed at night where such prowlers abound. Though quite helpless when young, as they grow order the great bill is a formidable weapon. They thrive best on soft food, corn meal, bran and ground oats being a good combination. Keep sand or gravel in the drinking trough constantly.

Preventing Disease.

The easiest way to prevent disease is to remove the cause

TO RID FOODS OF POISONS

Deleterious Substances May Be Removed if One Will Take a Little Pains With the Work.

To cook cranberries as they are brought from the market is to meet a keen disappointment in a delicate berry which many persons do not enjoy because its wild flavor is unpleasant to the taste. Clean the berries, place them in a pan with sufficient water to cover them, and add a half teaspoon of soda. Boil the berries in the soda water until you hear them bursting. Drain the water from them, it will be found a greenish black, rinse them in cold water, then cook with the sugar. It removes the tang and less sugar is needed to sweeten them if cooked in this way. The same method has been used successfully in cooking soup beans, from which the greenish water removes a poisonous substance, makes the bean clear and white when cooked and they cook in less time, too. Others have used soda water for cooking rice for a few minutes to remove the artificial glaze which is a coating of talcum, and a glue-like substance in which pure rice is immersed before it is ready for market.

COFFEE SERVED IN ORANGES

Idea Is From New Orleans, Where They Claim to Make the Best Beverage in America.

A young hostess recently pleased her dinner guests with a new way of serving after-dinner coffee, which she said was learned at a famous New Orleans cafe.

The entire rind of an orange is used as a cup. It is cut with a sharp knife, and the lower half is turned back to form a standard for the upper half, which is the cup. The orange remains between the two and unites them.

The cups are filled with boiling hot black coffee and sweetened by a lump of sugar dipped in cognac. A match applied to each cup before serving ignites the brandy and the flame so produced is aided by the oil of the orange rind, so that a charming effect is produced by a tray of these brightly burning cups. Each orange is placed on a small plate or saucer.

Mock Turtle Soup.

Boil a calf's head until the meat leaves the bones. Leave it in the seasoned soup until the next day, then take it out, scrape off the fat and remove the bones. Put in the jellied stock over the fire with the bones; the ears, chopped; one grated carrot, one sliced onion, a bunch of soup herbs, a teaspoonful of allspice, a saltspoonful of paprika and salt to taste. Boil for one hour. Take from the fire, strain, thicken with two tablespoonfuls of butter rolled in as much browned flour; add two tablespoonfuls of kitchen bouquet, and, when the soup is thickened, drop in the tongue and parts of the cheek cut into dice. Add a gill of cherry and the juice of a lemon, and pour upon forcemeat balls in a hot tureen. Make the forcemeat balls by rubbing the brains to a paste with a hard-boiled egg, a little browned flour and the yolk of a raw egg. Roll them in browned flour and let them stand in a quick oven until lightly crusted over.

Cabbage or Salad Dressing.

Melt in a double boiler one generous tablespoonful of butter. Add to it one tablespoonful of flour, one teaspoonful of sugar, one-half teaspoonful of made mustard, three dashes of paprika, one-quarter teaspoonful of salt, white pepper to taste. When these are well blended add slowly, stirring constantly to avoid lumps, one-half pint of boiling water and three drops of Worcestershire sauce. Continue stirring until thick. Cook five minutes; if too thick put in a little more water. Should the dressing be for cold slaw pour it while hot over finely shredded cabbage, if for salads use when cold.

Vegetable Ragout.

Put one cup each sliced turnips, potatoes and carrots into boiling water. Cook till tender. Melt two tablespoons of butter in another pan, stir into it one-half cup of minced onion and fry brown. Add two tablespoons browned flour and gradually one pint of hot water. When smooth turn contents of saucepan into it, season to taste with salt and pepper, cook slowly 30 minutes, dish and serve. Just before sending to table sprinkle a tablespoon of minced parsley over.

Dark Bread Pudding.

Take dry bread enough to fill a two-quart pan two-thirds full of bread after it is soaked, one-half cup molasses, one cup of sugar (brown if you have it, white will do), one cup of chopped suet or fat pork, two eggs, a pint of milk, two cups of chopped raisins. You can put in all kinds of spice. I only put in nutmeg and clove, salt teaspoon. I bake mine all night. Wants to be baked slowly. It is fine.—Boston Globe.

India Curried Eggs.

Put hard-boiled eggs in halves; then fry one small chopped onion and one chopped apple in hot butter; add one-fourth cup of pounded almonds and one pint of milk, mixed with one-half tablespoonful of cornstarch. Season with salt and a dessert spoonful of curry powder. Let cook ten minutes; then add the eggs. Let all get very hot. Serve with croutons; garnish with fried parsley.—The Mother's Magazine.